



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/037,588	10/23/2001	Michael Kenneth Brown	401052-A-01-US(Brown)	6479

47523 7590 02/10/2006

JOHN C. MORAN, ATTORNEY, P.C.
4120 EAST 115 PLACE
THORNTON, CO 80233-2623

EXAMINER

PHAN, JOSEPH T

ART UNIT	PAPER NUMBER
----------	--------------

2645

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/037,588

Applicant(s)

BROWN ET AL.

Examiner

Joseph T. Phan

Art Unit

2645

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 16 November 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1,4,6-17,19,22-27,29 and 31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1,4,6-17,19,22-27,29 and 31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 112

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 11 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11 lines 10-11 recites "...in response to the detection of speech indicating an absence of speech." This phrase unclear and confusing as it is contradictory in and of itself. If there is a detection of speech then speech is Not absent. Appropriate clarification and/or correction are required.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 11, 19 and 27-30 rejected under 35 U.S.C. 102(b) as being anticipated by Novas et al., Patent #5,521,967.

Regarding claims 1 and 17 Novas teaches a method for performing call classification for a destination endpoint on a call, comprising the steps of:
receiving audio information from the destination endpoint and analyzing using speech recognition analysis calculations the received audio information for words(col.5 lines 50-

60);

analyzing using the automatic speech recognition analysis calculations the received audio information for tones(col.5 lines 60-67, col.6 lines 8-29, and col.9 lines 31-40); and

determining a call classification for the destination endpoint in response to the analysis of the words and the analysis of the tones(42 Fig.2, Fig.11A-11B, and col.40).

Regarding claim 4 Novas teaches the method of claim 2 wherein the analysis for tones is analyzing the audio information for identifying a set of tones (col.5 lines 61-67).

Regarding claim 11 Novas teaches a method for performing call classification for a destination endpoint on a call, comprising the steps of:

receiving audio information from the destination endpoint and detecting for speech in received audio information(col.5 lines 50-60);

analyzing using automatic speech recognition the received audio information for words in response to the detection of speech indicating a presence of speech(col.5 lines 50-60); and

analyzing using automatic speech recognition the received audio information for tones (col.5 lines 61-67); and

determining a call classification for the destination endpoint in response to the analysis of words or the analysis of tones(42 Fig.2, Fig.11A-11B, and col.40).

Regarding claim 19, Novas teaches the method of claim 17 wherein the analyzed words are formed as phrases words(col.5 lines 50-60).

Regarding claim 27, Novas teaches a call classifier for determining the call

Art Unit: 2645

classification of a called destination endpoint, comprising:

an automatic speech recognizer for detecting first characteristics in audio information received from the called destination endpoint, the automatic speech recognizer further identifying tones in the audio information received from the called destination

endpoint(col.5 lines 61-67);

and inference engine for classifying the call in response to the automatic speech recognizer (col.1 lines 42-50, 42 Fig.2, Fig.11A-11B, and col.40, Novas' system/engine infers the words).

Regarding claim 28, Novas teaches the call classifier of claim 27 wherein the first characteristics are words (col.5 lines 50-60).

Regarding claim 29, Novas teaches the call classifier of claim 28 wherein the words are formed into phrases (col.5 lines 50-60).

Regarding claim 30, Novas teaches the call classifier of claim 28 wherein the second characteristics are tones (col.5 lines 61-67).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 6-10, 12-16, 22-26, and 31 rejected under 35 U.S.C. 103(a) as being unpatentable over Novas in view of Trandal et al., Patent #6088428.

Regarding claims 6, 8, 12, 14, 22, 24, and 31, Novas teaches the methods and call classifier of claims 5-6, 11-12, 21-22, and 30 wherein the step of analyzing for the first and second types of classification is responsive to the detection of speech and/or tone in the audio information(col.5 lines 50-67).

Novas is silent on executing a Hidden Markov Model to determine the presence of words or tones in the audio information.

Trandal discloses using a Hidden Markov Model to determine the presence of words and/or tones in audio information (col.8 lines 16-25 and col.23 lines 17-28)

At the time the invention was made, it would have been obvious to a person of ordinary skill in the to use the Hidden Markov Model as taught by Trandal to determine the presence of words or tones. One of ordinary skill in the art would have been motivated to do this because the Hidden Markov Model is a common and well-known algorithm for recognizing speech as disclosed in Novas's speech recognition system.

Regarding claims 7, 13, and 23, Novas in view of Trandal teaches the methods of claims 6, 12, and 22 wherein the step of executing comprises the step of using a grammar for speech(col.5 lines 50-67).

Regarding claims 9, 15, and 25, Novas in view of Trandal teaches the method of claims 8, 14, and 24 wherein the step of executing comprises the step of using a grammar for tones(col.5 lines 50-67).

Regarding claims 10, 16, and 26, Novas in view of Trandal teaches the method of claims 8, 14, and 24 wherein the step of determining comprises the step of executing

Art Unit: 2645

an inference engine (col.1 lines 42-50, 42 Fig.2, Fig.11A-11B, and col.40, engine infers the words).

Response to Arguments

4. Applicant's arguments with respect to claims 1,4,6-17, 19, 22-27, 29, and 31 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Joseph T. Phan whose telephone number is (571) 272-7544. The examiner can normally be reached on Mon-Fri 9am-6pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Fan Tsang can be reached on (571) 272-7547. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JTP
February 3, 2006



FAN TSANG
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2600